



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,289	11/21/2003	Thomas R. Lemmons	UV-I Cont. 5	2133
1473	7590	11/28/2007		
ROPES & GRAY LLP PATENT DOCKETING 39/361 1211 AVENUE OF THE AMERICAS NEW YORK, NY 10036-8704			EXAMINER ALAM, MUSHFIKH I	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 11/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/719,289	Applicant(s) LEMMONS ET AL.	
	Examiner Mushfikh Alam	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :10/1/07, 3/31/06, 12/19/03, 11/21/03.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim(s) 41-53 is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 41-53 defines a machine-readable medium embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory that is executed and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally

interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed machine-readable medium can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium that is executed" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2-12, 14-25, 27-38, 40-51, 53 are rejected under 35 U.S.C. 102(e) as being anticipated by Youman et al (US 5629733).

Claim 2, Youman teaches a method for allowing a user to access interactive program guide features on a television monitor on which appears a first display (television program signal), the method comprising:

- receiving a menu input (mode key) from the user through a remote control (fig. 3; C 10, L 33-36);
- displaying (figs. 5, 6, 11), in response to the menu input (mode key press), an interactive program guide menu (FLIP, BROWSE, MENU) simultaneously with at least a substantial portion of the first display (television program signal, fig. 5), wherein the interactive program guide menu comprises a plurality of menu choices corresponding to a plurality of display modes (FLIP, BROWSE, MENU) of the interactive program guide (figs. 5, 6, 11; C 11, L 63-65; C 13, L 12-15; C 15, L 20-24); and
- displaying, in response to receiving through the remote control a user selection of a particular menu choice (FLIP, BROWSE, MENU) from the plurality of menu choices, program guide information (description of mode that is activated i.e. FLIP, BROWSE, MENU) that is associated with the particular menu choice (figs. 5, 6, 11).

Claim 3, Youman teaches the method of claim 2 wherein displaying an interactive program guide menu comprising a plurality of menu choices comprises displaying an interactive program guide menu (MENU mode i.e. depressing the mode key one or two times from FLIP or BROWSE mode) comprising a menu choice corresponding to a program listings display mode (C 15, L 20-24).

Claim 4, Youman teaches the method of claim 3 wherein displaying program guide information associated with the particular menu choice comprises displaying a plurality of interactive program listings in response to receiving a user selection of the menu choice (choosing TV guide from MENU mode) corresponding to the program listings display mode (figs 6, 18).

Claim 5, Youman teaches the method of claim 2 wherein displaying an interactive program guide menu comprising a plurality of menu choices comprises displaying an interactive program guide menu comprising a menu choice corresponding to a program search display mode (fig. 38F; C 15, L 51-67; C 31, L 52-C 32, L 16).

Figure 38A displays an alternative menu screen that may be accessed by depressing the mode key a specified number of times.

Claim 6, Youman teaches the method of claim 5 wherein displaying program guide information associated with the particular menu choice comprises displaying, in response to receiving a user selection of the menu choice corresponding to the program search display mode, an interactive program guide interface from which the user can initiate a restrictive search (based of alpha characters) of a database of program schedule data (fig. 38F; C 31, L 52-C 32, L 16).

Claim 7, Youman teaches the method of claim 2 wherein displaying an interactive program guide menu comprising a plurality of menu choices comprises displaying an interactive program guide menu comprising a menu choice (e.g. BY TIME) corresponding to a day to view display mode (figs. 38A, 38B). *A user may change the day by using the left and right scroll arrows shown in figure 38B.*

Claim 8, Youman teaches the method of claim 7 wherein displaying program guide information associated with the particular menu choice comprises displaying, in

response to receiving a user selection of the menu choice corresponding to the day to view display mode (e.g. BY TIME), a plurality of selectable day options (by scrolling through days) each corresponding to a unique day for which program schedule information is available, wherein program schedule information corresponding to a particular day option (e.g. TODAY) is displayed in response to the particular day option being selected (fig. 38B).

Claim 9, Youman teaches the method of claim 2 wherein displaying an interactive program guide menu (fig. 6) comprising a plurality of menu choices (TV guide, home theater, customer service) comprises displaying an interactive program guide menu comprising a menu choice (favorite channel, fig. 7) corresponding to a favorite channel display mode (C 25, L 61-C 26, L 12).

Claim 10, Youman teaches the method of claim 9 wherein displaying program guide information associated with the particular menu choice comprises displaying, in response to receiving a user selection of the menu choice corresponding to the favorite channel display mode, an interactive program guide interface from which the user can select a favorite channel line-up (fig. 8 C 25, L 61-C 26, L 12).

Claim 11, Youman teaches the method of claim 2 wherein the first display (program signal) comprises video for a given television program and wherein displaying an interactive program guide menu comprises displaying the interactive program guide

menu simultaneously with at least a substantial portion of the video for the given television program (fig. 5; C 11, L 63-C 12, L 11).

Claim 12, Youman teaches the method of claim 2 wherein the first display (program signal) comprises an interactive program guide display (FLIP, BROWSE, MENU overlay) and wherein displaying an interactive program guide menu comprises displaying the interactive program guide menu simultaneously with at least a substantial portion of the interactive program guide display (fig. 5, 6, 11).

Claim 14, Youman teaches the method of claim 2 further comprising displaying, in response to receiving from the user through the remote control (fig. 4) a user selection to view additional menu choices, new menu choices (customer service) in the interactive program guide menu in place of the displayed menu choices (messages) (replacing messages with customer service) (fig. 6; C 25, L 61-C 26, L 12).

Claims 15-25, and 27 are analyzed as apparatuses of claims 2-12, and 14.

Claims 28-38, and 40 are also analyzed as apparatuses of claims 2-12, and 14.

Claims 41-51, and 53 recite a machine readable medium to perform the steps of claims 2-12 and 14 above. It is inherent that Youman contains a computer-readable medium to perform the steps of claims 2-12 and 14 as noted above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13, 26, 39, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Youman et al. (US 5629733) in view of Hendricks (2005/0157217).

Claim 13, Youman is silent regarding the method of claim 2 further comprising:

- defining at a remote location operational parameters indicating default menu choices for the interactive program guide menu; and
- transmitting the operational parameters to user equipment; wherein displaying the interactive program guide menu comprises displaying the interactive program guide menu comprising the default menu choices.

Hendricks teaches the method further comprising:

- defining at a remote location (headend) operational parameters (menu driver access scheme) indicating default menu choices for the interactive program guide menu (p. [0014]); and
- transmitting the operational parameters to user equipment (subscribers); wherein displaying the interactive program guide menu comprises displaying the interactive program guide menu comprising the default menu choices (p. [0014]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided menu functionality created at the

headend as taught by Hendricks to the system of Youman to allow the user to sequence through the various menus (p. [0014]).

Claim 26 is analyzed as an apparatus of claim 13.

Claim 39 is also analyzed as an apparatus of claim 13.

Claim 52 recites a machine readable medium to perform the steps of claim 13. It is inherent that Hendricks contains a computer-readable medium to perform them steps of claim 13 as noted above.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Young et al. (6850693) is cited to teach a user interface for television schedule system.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mushfikh Alam whose telephone number is (571) 270-1710. The examiner can normally be reached on Mon-Fri: 8:30-18:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone

Application/Control Number:
10/719,289
Art Unit: 2623

Page 10

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MA
11/15/2007


ANDREW Y. KOENIG
PRIMARY PATENT EXAMINER